

Please type a plus (+) sign in this box →



|  |   |    |   |                        |                                     |
|--|---|----|---|------------------------|-------------------------------------|
| Substitute for form 1449<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |    |   | Attorney Docket Number | 80050 (US02)                        |
|  |   |    |   | First Named Inventor   | Richard Kingsley Stuart, Jr. et al. |
|  |   |    |   | COMPLETE IF KNOWN      |                                     |
|  |   |    |   | Application Number     |                                     |
|  |   |    |   | Filing Date            |                                     |
|  |   |    |   | Group Art Unit         |                                     |
| Sheet  | 1 | of | 3 | Examiner Name          |                                     |

| U.S. PATENT DOCUMENTS |                       |                      |                                      |   |   |
|-----------------------|-----------------------|----------------------|--------------------------------------|---|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | U.S. Patent Document |                                      | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document<br>MM-DD-YYYY |
|                       |                       | Number               | Kind Code <sup>2</sup><br>(if known) |   |   |
| P.S.                  |                       | 3,898,069            |                                      | Kosaka et al.                                   | 07-22-1975  |
| ↑                     |                       | 4,091,134            |                                      | Uemura et al.                                   | 05-23-1978  |
|                       |                       | 4,145,298            |                                      | Trepka  | 03-20-1979  |
|                       |                       | 4,238,202            |                                      | Trepka et al.                                   | 12-09-1980  |
|                       |                       | 4,240,946            |                                      | Hemersam  | 12-23-1980  |
|                       |                       | 4,242,246            |                                      | Maldonado et al.                                | 12-30-1980  |
|                       |                       | 4,328,147            |                                      | Chang et al.                                    | 05-04-1982  |
|                       |                       | 4,330,449            |                                      | Maldonado et al.                                | 05-18-1982  |
|                       |                       | 4,382,989            |                                      | Chang et al.                                    | 05-10-1983  |
|                       |                       | 4,412,019            |                                      | Kraus   | 10-25-1983  |
|                       |                       | 4,451,598            |                                      | Decroix   | 05-29-1984  |
|                       |                       | 4,497,921            |                                      | Chang et al.                                    | 02-05-1985  |
|                       |                       | 4,659,759            |                                      | Jevanoff et al.                                 | 04-21-1987  |
|                       |                       | 4,738,998            |                                      | Uffner et al.                                   | 04-19-1988  |
|                       |                       | 4,839,404            |                                      | Chang et al.                                    | 08-13-1989  |
|                       |                       | 4,872,930            |                                      | Kajikawa et al.                                 | 10-10-1989  |
|                       |                       | 4,933,384            |                                      | Wolfe   | 08-12-1990  |
|                       |                       | 4,978,898            |                                      | Woodhams  | 12-18-1990  |
|                       |                       | 4,988,747            |                                      | Strommer  | 01-29-1991  |
|                       |                       | 5,017,230            |                                      | Hopkins et al.                                  | 05-21-1991  |
|                       |                       | 5,039,755            |                                      | Chamberlain et al.                              | 08-13-1991  |
| P.S.                  |                       | 5,070,123            |                                      | Moran   | 12-03-1991  |

|                    |               |                 |          |
|--------------------|---------------|-----------------|----------|
| Examiner Signature | Peter Srebnik | Date Considered | 12/13/91 |
|--------------------|---------------|-----------------|----------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Please type a plus (+) sign in this box →



|  |   |    |   |                        |  |                                     |  |  |  |
|--|---|----|---|------------------------|--|-------------------------------------|--|--|--|
| Substitute for form 1449<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |    |   | Attorney Docket Number |  | 80050 (US02)                        |  |  |  |
|  |   |    |   | First Named Inventor   |  | Richard Kingsley Stuart, Jr. et al. |  |  |  |
|  |   |    |   | COMPLETE IF KNOWN      |  |                                     |  |  |  |
|  |   |    |   | Application Number     |  |                                     |  |  |  |
|  |   |    |   | Filing Date            |  |                                     |  |  |  |
| Group Art Unit   |   |    |   |                        |  |                                     |  |  |  |
| Sheet  | 2 | of | 3 | Examiner Name          |  |                                     |  |  |  |

|      |  |           |    |                   |            |
|------|--|-----------|----|-------------------|------------|
| P.S. |  | 5,095,055 |    | Moran             | 03-10-1992 |
| A    |  | 5,266,615 |    | Omeis et al.      | 11-30-1993 |
|      |  | 5,280,064 |    | Hesp et al.       | 01-18-1994 |
|      |  | 5,302,638 |    | Ho et al.         | 04-12-1994 |
|      |  | 5,314,935 |    | Chaverot et al.   | 05-24-1994 |
|      |  | 5,328,943 |    | Isobe et al.      | 07-12-1994 |
|      |  | 5,380,773 |    | Bellio et al.     | 01-10-1995 |
|      |  | 5,382,612 |    | Chaverot et al.   | 01-17-1995 |
|      |  | 5,473,000 |    | Pinomaa           | 12-05-1995 |
|      |  | 5,482,982 |    | Lakshmanan et al. | 01-09-1996 |
|      |  | 5,508,112 |    | Planche et al.    | 04-16-1996 |
|      |  | 5,549,744 |    | Puzic et al.      | 08-27-1996 |
|      |  | 5,565,510 |    | Glavarini et al.  | 10-15-1996 |
|      |  | 5,605,946 |    | Planche et al.    | 02-25-1997 |
|      |  | 5,756,565 |    | Germanaud et al.  | 05-26-1998 |
|      |  | 5,773,496 |    | Grubba            | 06-30-1998 |
|      |  | 5,795,929 |    | Grubba            | 08-18-1998 |
|      |  | 5,840,109 |    | Braga et al.      | 11-24-1998 |
|      |  | 6,069,194 |    | Frazen et al.     | 05-30-2000 |
|      |  | 6,087,420 |    | Planche et al.    | 07-11-2000 |
|      |  | 6,127,461 |    | Takamura et al.   | 10-03-2000 |
|      |  | 6,284,820 | B1 | Braga et al.      | 09-04-2001 |
|      |  | 6,348,525 | B1 | Takamura et al.   | 02-19-2002 |
|      |  | 6,359,033 | B1 | Alt-Kadi et al.   | 03-19-2002 |
| P.L. |  | 6,429,241 | B1 | Liang             | 08-06-2002 |

|                    |                       |                 |          |
|--------------------|-----------------------|-----------------|----------|
| Examiner Signature | <i>Peter S. Kelly</i> | Date Considered | 12/13/05 |
|--------------------|-----------------------|-----------------|----------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Please type a plus (+) sign in this box →



|  |   |    |   |                        |  |                                     |  |  |  |
|--|---|----|---|------------------------|--|-------------------------------------|--|--|--|
| Substitute for form 1449<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |    |   | Attorney Docket Number |  | 80050 (US02)                        |  |  |  |
|  |   |    |   | First Named Inventor   |  | Richard Kingsley Stuart, Jr. et al. |  |  |  |
|  |   |    |   | COMPLETE IF KNOWN      |  |                                     |  |  |  |
|  |   |    |   | Application Number     |  |                                     |  |  |  |
|  |   |    |   | Filing Date            |  |                                     |  |  |  |
| Group Art Unit   |   |    |   |                        |  |                                     |  |  |  |
| Sheet  | 3 | of | 3 | Examiner Name          |  |                                     |  |  |  |

|      |  |              |    |                    |            |
|------|--|--------------|----|--------------------|------------|
| P.S. |  | 6,441,065    | B1 | Chevillard et al.  | 08-27-2002 |
| ↑    |  | 6,486,249    | B1 | Dituro et al.      | 11-26-2002 |
|      |  | 6,569,925    | B2 | Baumgardner et al. | 05-27-2003 |
| ↓    |  | 2003/0032703 | A1 | Liang              | 02-13-2003 |
|      |  | 2003/0165682 | A1 | Menting et al.     | 09-04-2003 |
| P.S. |  | H1250        |    | Gilmore et al.     | 11-02-1993 |
|      |  |              |    |                    |            |
|      |  |              |    |                    |            |

| FOREIGN PATENT DOCUMENTS |                       |                         |                     |                                   |   |  |    |
|--------------------------|-----------------------|-------------------------|---------------------|-----------------------------------|---|--|----|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document |                     |                                   | Name of Patentes or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | T* |
|                          |                       | Office <sup>3</sup>     | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |   |  |    |
| P.S.                     |                       | DE                      | 3819831 (abstract)  | C2                                | Veba Oel AG                                     | 10-25-1990                                       |    |
| P.S.                     |                       | JP                      | 6192579 (abstract)  | A                                 | Showa Shell Sekiyu KK                           | 12-25-1992                                       |    |
| P.S.                     |                       | JP                      | 52028621 (abstract) | A                                 | Toyo Soda KK                                    | 03-05-1977                                       |    |
| P.S.                     |                       | JP                      | 62079268            | A                                 | Idemitsu Petrochem Co                           | 10-03-1985                                       |    |
|                          |                       |                         |                     |                                   |   |  |    |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS |                       |  |    |
|---|-----------------------|--|----|
| Examiner Initials*                                | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue number(s), publisher, city and/or country where published. | T* |
|   |                       |  |    |
|   |                       |  |    |

|                    |                     |               |          |
|--------------------|---------------------|---------------|----------|
| Examiner Signature | <i>Peter Srekeh</i> | Date          | 12/13/05 |
|                    |                     | C. Considered |          |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Please type a plus (+) sign in this box →



Substitute for form 1449

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

Attorney Docket Number 80050 US02

First Named Inventor Stuart et al.

COMPLETE IF KNOWN

Application Number 10/706,522

Filing Date November 12, 2003

Group Art Unit 1714

Examiner Name

Sheet 1 of 1



## **U.S. PATENT DOCUMENTS**

| Examiner<br>Initials <sup>a</sup> | Cite<br>No. <sup>1</sup> | U.S. Patent Document |                                      | Name of Patentee or Applicant of Cited Document | Date of Publication<br>of Cited Document<br>MM-DD-YYYY |
|-----------------------------------|--------------------------|----------------------|--------------------------------------|---|--|
|                                   |                          | Number               | Kind Code <sup>2</sup><br>(if known) |   |  |
|                                   |                          |                      |                                      |   |  |
|                                   |                          |                      |                                      |   |  |
|                                   |                          |                      |                                      |   |  |
|                                   |                          |                      |                                      |   |  |

## **FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials <sup>a</sup> | Cite<br>No. <sup>1</sup> | Foreign Patent Document |                     |                                      | Name of Patentee or Applicant of Cited Document | Date of Publication<br>of Cited Document<br>MM-DD-YYYY | T <sup>3</sup> |
|-----------------------------------|--------------------------|-------------------------|---------------------|--------------------------------------|---|--|----------------|
|                                   |                          | Office <sup>4</sup>     | Number <sup>4</sup> | Kind Code <sup>2</sup><br>(if known) |   |  |                |
|                                   |                          |                         |                     |                                      |   |  |                |
|                                   |                          |                         |                     |                                      |   |  |                |
|                                   |                          |                         |                     |                                      |   |  |                |
|                                   |                          |                         |                     |                                      |   |  |                |

## **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials <sup>a</sup> | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>3</sup> |
|-----------------------------------|--------------------------|--|----------------|
| PS                                | ✓                        | Louis T. Germinario and Terry L. Cutshall, "Aging Effects on Compatibility, Stability and Morphology of Asphalt-Polymer Blends, Part I," Petersen Asphalt Research Conference, July, 2002  |                |
|                                   |                          |  |                |
|                                   |                          |  |                |

Examiner  
Signature

*Peter Sulek*

Date  
Considered

12/13/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO-Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.